04:

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FM PRESINSURV NORFOLK VA
TO CNO WASHINGTON DC//N09/N6/N43/N45/N77//
COMFLTFORCOM NORFOLK VA//N00/N01//
COMLANTFLT NORFOLK VA//N01/N43/N6//
COMPACELT PEARL HARBOR HI//N01/N43/N6//
COMNAVSUBFOR NORFOLK VA//N01/N02M/N4/N41/N431/N9//
COMNAVSEASYSCOM WASHINGTON DC//SEA 03/03D/03D5/04M/04R/04X/04L/
       05J/05L/05N/05P/05U/05Z/08/07/07T/072T/07T23/07T34/
       07T341/PMS350/PMS392/PMS395/PMS450//
COMSUBPAC PEARL HARBOR HI//N01/02M/N4/N41/N432/N9//
NAVPERSDEVCOM NORFOLK VA//N5//
COMOPTEVFOR NORFOLK VA//40//
COMNAVSAFECEN NORFOLK VA//30//
PEO SUB WASHINGTON DC//SUB/SUB-B/PMS401/PMS415/PMS425//
PEO IWS WASHINGTON DC//00//
NAVUNSEAWARCENDIV NEWPORT RI//4122//
COMSPAWARSYSCOM SAN DIEGO CA//04F/05/PD50/PMW173/176//
MIDLANT RMC NORFOLK VA//213/4100//
SOUTHWEST RMC SAN DIEGO CA
HAWAII RMC PEARL HARBOR HI
NAVSURFWARCEN CARDEROCKDIV BETHESDA MD//713//
NAVSURFWARCEN SHIPSYSENGSTA PHILADELPHIA PA//1126/9613/9126/
       9781//
SUBMEPP PORTSMOUTH NH//1811//
MSGID/GENADMIN/PRESINSURV NORFOLK VA/-/NOV//
SUBJ/MSG RETRANSMITTALINSURV SUBMARINE MATERIAL INSPECTION (MI)
/ISSUES//
REF/A/DOC/PRESINSURV/30JUN04//
REF/B/DOC/CNO/12JUL01//
REF/C/GEDADMIN/COMNAVSEASYSCOM/180520ZAUG04//
REF/D/DOC/MILSPEC-S-16036K//
REF/E/GENADMIN/COMNAVSEASYSCOM/100316ZJUL96//
NARR/REF A IS INSURVINST 4730.2E, TRIALS AND MATERIAL
INSPECTIONS OF SUBMARINES, REF B IS OPNAVINST 4730.7E, MATERIAL
INSPECTION OF SUBMARINES BY THE BOARD OF INSPECTION AND SURVEY,
REF C IS ADVISORY ON AUTHORIZED BEDDING MATERIALS, REF D IS
MILSPEC-S-16036K, MILSPEC FOR NAVAL SHIPBOARD SWITCHGEAR, AND
REF E IS SAFETY ADVISORY CONCERNING MOTOR CONTROLLER GROUND
STRAP REQUIREMENTS.//
POC/E.J. ROESKE/CAPT/INSURV/EMAIL: ERNEST.ROESKE@NAVY.MIL/
COMM: 757-462-7693 EXT. 3037/DSN: 253//
RMKS/1. FOR TYCOMS: REQUEST THIS MESSAGE BE READDRESSED FOR
WIDEST DISSEMINATION TO APPROPRIATE ISICS AND SHIPYARD
REPRESENTATIVES.
   THE SUBMARINE BOARD OF INSPECTION AND SURVEY CONDUCTS MIS
ON ALL SUBMARINES IAW REF A AND SCHEDULES IAW REF B. THIS
MESSAGE HIGHLIGHTS COMMON PROBLEMS SEEN ON THE NINE SUBMARINE
MIS CONDUCTED DURING THE FIRST EIGHT MONTHS OF CALENDAR YEAR
2004 AND PROVIDES INFORMATION ON PREPARING FOR AND ACCOMPLISHING
AN MI.
3. THE FOLLOWING IS A LIST OF DEFICIENCIES FOUND ON FOUR OR
MORE SUBMARINES INSPECTED DURING THE FIRST EIGHT MONTHS OF CY
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A. AFFF EXTINGUISHERS: 5 OF 9 SUBMARINES INSPECTED HAD SEVERAL

AFFF EXTINGUISHERS WHICH WEIGHED OUTSIDE THE ALLOWABLE BAND PER MRC 6641/R-2.

- B. LIOH CANISTERS: 5 OF 9 SUBMARINES INSPECTED HAD SEVERAL LIOH CANISTERS WHICH HAD THE MRC 24M-2R INCORRECTLY PERFORMED.
- C. ALL 9 SUBMARINES INSPECTED HAD UNAUTHORIZED BEDDING MATERIAL IN BERTHING AREAS. REF C PROVIDES INFORMATION ON AUTHORIZED BEDDING MATERIAL.
- D. VENTILATION DUCT CLEANLINESS: ALL SUBMARINES INSPECTED HAD SOME DEGREE OF EXCESS LINT/DIRT/ETC. RETURN LINE SUCTION FILTERS WERE FREQUENTLY CLOGGED. KEEPING DUCTS CLEAN WITH CURRENT PROCESSES IS DIFFICULT, BUT SHIPS SHOULD AGGRESSIVELY PURSUE ACCOMPLISHMENT OF VENTILATION CLEANING MRCS (LISTED ON MIP 5132). SHIPS CAN ALSO ACCOMPLISH CLEANING WHEN DUCTS ARE ACCESSIBLE DUE TO MAINTENANCE (SUCH AS FAN REMOVAL). DUST BUILD-UP CAN BECOME A HEALTH ISSUE IF MOLD STARTS TO GROW.
- E. HIGH PRESSURE AIR COMPRESSORS (HPAC): 5 OF 9 SUBMARINES INSPECTED HAD SIGNIFICANT HPAC PROBLEMS. THE VARIOUS FAILURES COULD HAVE BEEN PREVENTED BY TREND ANALYSIS AND MONITORING PMS.
- F. SWITCHBOARDS: 6 OF 9 SUBMARINES INSPECTED HAD SWITCHBOARD CABLES IN CONTACT WITH OPPOSING PHASE BUSWORK. REF D, PARAGRAPHS 3.10.8 AND 3.11.3, ADDRESSES THIS ISSUE.
- G. CONTROLLERS/PANELS: 5 OF 9 SUBMARINES INSPECTED HAD MOTOR CONTROLLERS/ELECTRICAL PANELS WITH DOOR MOUNTED CIRCUITRY WITHOUT GROUND STRAPS. REF E CONTAINS INFORMATION CONCERNING GROUND STRAPS. CONTACT INSURV FOR REF E. WHILE THIS IS AN IMPROVEMENT FROM 9 OF 9 SUBMARINES INSPECTED IN 2003, IT STILL REMAINS AN ISSUE.
- H. TOWED ARRAYS: 4 OF 9 SUBMARINES INSPECTED HAD SIGNIFICANT PROBLEMS WITH EITHER THEIR TOWED ARRAY OR THE TOWED ARRAY HANDLING SYSTEM. PROBLEMS INCLUDED OUT-OF-SPEC HYDRAULIC PARAMETERS, FLUSHING PRESSURE DEFICIENCIES, AND OA-9070 PENDANT CABLE OR SLIP RING GROUNDS.
- I. RADIATED NOISE: 5 OF 9 SUBMARINES INSPECTED COULD NOT DETERMINE RADIATED NOISE ESTIMATES FROM HULL VIBRATION MONITORING SYSTEM DATA DUE TO MISSING ANALYSIS SOFTWARE. SOFTWARE IS BEING DISTRIBUTED TO FLEET UNITS.
- J. BEARING TEMP ALARMS: 51 PERCENT OF MAIN ENGINE, 29 PERCENT OF REDUCTION GEAR, AND 48 PERCENT OF SSTG RTES WERE EITHER INOP OR SET IMPROPERLY. OVER 90 PERCENT OF THE IMPROPERLY SET RTES WERE SET TOO LOW. NSTM CHAP 231-3.10.3.5 REV 5 GIVES GENERAL RTE ALARM DETERMINATION PROCEDURES. AI ITEMS (SSN N3380 AND N3381 FOR 688S, TRID T0137 FOR SSBNS, AND N3382 FOR SSN 21) WERE ISSUED DIRECTING UNITS TO CONDUCT A ONE TIME CHECK OF RTE SET POINTS WITH SPECIFIC GUIDANCE TO ACHIEVE THE MAXIMUM BASELINE OPERATING CONDITIONS. SUBMEPP TEST PROCEDURES WERE ALIGNED WITH NSTM REQUIREMENTS TO MINIMIZE IMPROPER SET POINTS. WHEN CONDUCTING MAIN ENGINE JOURNAL BEARING RTE BASELINE DETERMINATION, IT IS IMPORTANT TO STABILIZE SHIP SPEED BEFORE THROWING THE RUDDER AND MAINTAIN THE RUDDER ANGLE UNTIL ALL MAIN ENGINE JOURNAL BEARING TEMPERATURES PEAK.
- ENGINE JOURNAL BEARING TEMPERATURES PEAK.

 K. MAIN CONDENSER BOOTS: 83 PERCENT OF SSTG CONDENSER BOOTS

 AND 55 PERCENT OF MAIN ENGINE CONDENSER BOOTS WERE OILY. SSTG

 TURNING GEAR LEAKS, INEFFECTIVE VENT FOG PRECIPITATORS, AND

 INADEQUATE HOUSEKEEPING WERE THE MAJOR CONTRIBUTORS. NAVSEA
- L. PERISCOPE HOIST RODS: 4 OF 9 SUBMARINES INSPECTED HAD AT LEAST ONE HOIST ROD LOOSE ON A TYPE 18 AND/OR TYPE 8 PERISCOPE.

TECH MANUAL 0946-018-5010 REFERS.

- M. N1 POWER PANEL: 7 OF 9 SUBMARINES INSPECTED HAD SAFETY AI 3171 INCOMPLETE OR PARTIALLY COMPLETE ON POWER PANEL N1.
- N. SAIL PRESERVATION: 7 OF 9 SUBMARINES INSPECTED HAD SIGNIFICANT SAIL PRESERVATION ISSUES.
- O. STEINKE HOODS: 5 OF 6 SUBMARINES INSPECTED WITH STEINKE HOODS WERE INOPERATIVE. CRACKS AND TEARS IN THE FACE SHIELD WERE THE MAJOR CAUSE OF STEINKE HOOD PROBLEMS.
- 4. OBSERVATIONS DURING MIS. THE FOLLOWING AREAS WERE NOT LISTED AS MATERIAL DEFICIENCIES DURING MIS, BUT WERE GENERAL OBSERVATIONS NOTED BY INSPECTION TEAM MEMBERS:
- A. OF THE SEVEN NON-SEIE SUBMARINES INSPECTED, THREE OF THE SHIPS FORCE PERSONNEL CHARGING STEINKE HOODS WERE NOT FAMILIAR WITH THE CHARGING OPERATION.
- B. DAMAGE CONTROL EQUIPMENT PMS: ALTHOUGH NOT A FORMAL PMS ASSESSMENT, DC DEFICIENCIES FOUND DURING MIS WERE FREQUENTLY RELATED TO WHETHER OR NOT DC PMS WAS PROPERLY PERFORMED. FOR THE FIRST EIGHT MONTHS OF 2004, THE PERCENT OF PMS RELATED DEFICIENCIES VARIED FROM 28 TO 88 WITH AN AVERAGE OF 67 PERCENT. C. DAMAGE CONTROL EQUIPMENT REFERENCES: ALTHOUGH MOST OF THE
- C. DAMAGE CONTROL EQUIPMENT REFERENCES: ALTHOUGH MOST OF THE DC INSPECTION FOLLOWS PMS MRCS, REFERENCE IS SOMETIMES MADE TO OLDER DOCUMENTS (FLASH, NAVSEA MESSAGES) THAT SOME SHIPS DO NOT HAVE. THE INFORMATION CONTAINED IN THOSE REFERENCES IS AVAILABLE THROUGH THE SAFETY CENTER WEB SITE,
- WWW.SAFETYCENTER.NAVY.MIL. GO TO AFLOAT, SUBMARINE DIVISION, SUBMARINE RESOURCES, DOWNLOADABLE ITEMS, AND DAMAGE CONTROL HAZARD REVIEW. THESE REVIEWS CONTAIN INFORMATION ABOUT DC EQUIPMENT.

5. INSURV PREPARATIONS:

- A. PER REF A, THE SHIP WILL RECEIVE A LETTER FROM PRESINSURV WHICH GIVES GENERAL INFORMATION ABOUT THE INSPECTION AND PROVIDES COPIES OF A PREPARATION CHECKLIST. REF A ALSO PROVIDES A LIST OF INSPECTIONS, THE RESULTS OF WHICH MAY BE ACCEPTED IN LIEU OF MI EVENTS, SUBSEQUENT TO REVIEW BY THE COGNIZANT SUBMARINE BOARD MEMBER. THE LETTER WILL ALSO IDENTIFY A RECORDER FOR THE MI, WHO IS THE SHIPS CONTACT FOR QUESTIONS CONCERNING THE MI. THE PREPARATION CHECKLIST PROVIDES VALUABLE INFORMATION ABOUT THE OVERALL CONDUCT OF THE MI AS WELL AS SPECIFIC INFORMATION ABOUT EACH INSPECTION AREA. AS SOON AS A SHIPS MI IS SCHEDULED, THE SHIPS INSURV COORDINATOR SHOULD DOWNLOAD INFORMATION VIA THE WEB SITE FOR REVIEW. DO NOT WAIT FOR THE LETTER.
- B. ABOUT 45 DAYS PRIOR TO THE MI, AN INSURV INSPECTOR CLEARANCE INFO MESSAGE, ASSIST REQUEST MESSAGE, AND A SERVICES REQUEST MESSAGE WILL BE TRANSMITTED BY INSURV. THE INSURV INSPECTOR CLEARANCE MESSAGE IDENTIFIES PERSONNEL FROM INSURV WHO WILL BE CONDUCTING THE INSPECTION. THE ASSIST REQUEST MESSAGE IDENTIFIES THE TYPE OF TECHNICAL ASSISTANTS REQUESTED BY INSURV TO SUPPORT AN INSPECTION. ASSISTANTS CLEARANCE INFO WILL BE TRANSMITTED SEPCOR VIA THEIR PARENT ACTIVITY. ALL OF THE INSURV INSPECTORS AND SOME OF THE ASSISTANTS (NORMALLY 15 RIDERS FOR BOTH A 688 AND A TRIDENT) WILL GET UNDERWAY (THIS IS AN INCREASE OF 1 RIDER FOR 688S, AN IT ASSISTANT HAS BEEN ADDED).
- C. REF A CONTAINS SAMPLE MI AGENDAS FOR SSNS AND SSBNS. EACH SHIP SHOULD PREPARE AN AGENDA FOLLOWING THE EVENT TIMELINES OF THE SAMPLE AGENDAS. THE SAMPLE TIMELINE/EVENT SEQUENCING SHOULD BE ADHERED TO AS MUCH AS POSSIBLE, AS IT IS BASED ON NUMEROUS SUCCESSFUL MIS. THE SHIP MAY PROPOSE AGENDA MODIFICATIONS BASED

- ON RECENT INSPECTIONS AS DESCRIBED IN THE BASIC PRE-MI LETTER.

 6. POST OVERHAUL MIS: PER REF B, MIS FOLLOWING AN ERP/EOH/ERO/
 DMP ARE TO BE CONDUCTED WITHIN 90 DAYS OF OVERHAUL COMPLETION.
 FOR MIS WITHIN 90 DAYS, EVENTS CONDUCTED DURING POST OVERHAUL
 SEA TRIALS WILL BE EVALUATED FOR SUBSTITUTION OF MI ITEMS. THE
 SHIP SHOULD PROPOSE WHICH ITEMS IT WOULD LIKE TO SUBSTITUTE AND
 PROVIDE SHIPYARD DATA FOR INSURV REVIEW. THE INSURV WEB SITE
 HAS A LIST OF SEA TRIALS TESTS. GO TO INSPECTION PREPS,
 SUBMARINES, AND ADDITIONAL APPLICABLE INSPECTIONS.
- 7. INSURV WEB SITE: THE INSURV WEB SITE, WWW.SPAWAR.NAVY.MIL/FLEET/INSURV, WAS RECENTLY UPDATED TO PROVIDE ADDITIONAL INFORMATION TO PREPARE FOR MIS AS WELL AS IMPROVE SHIPS MATERIAL CONDITION.
- A. REF A, RECENTLY PROMULGATED, IS AVAILABLE.
- B. INSPECTION CHECKLISTS FOR ALL INSPECTION AREAS ARE NOW AVAILABLE. THESE CHECKLISTS TAKE YOU THROUGH THE INSPECTION PROCESS IN EACH AREA. CHECKLISTS AVAILABLE FOR DOWNLOADING ARE IN THE OCCUPATIONAL HEALTH, ENVIRONMENTAL PROTECTION, MEDICAL, AND SUPPLY AREAS. FOR OTHER INSPECTION AREAS, THE WEBSITE CONTAINS A LINK TO CONTACT INSPECTORS IN THE AUXILIARY, WEAPONS/DECK, DAMAGE CONTROL/HABITABILITY, MAIN PROPULSION/REACTOR, NAVIGATION/OPERATIONS/INFORMATION SYSTEMS, AND ELECTRICAL AREAS IN ORDER TO REQUEST A CHECKLIST.
- C. THE MI DATA WAREHOUSE CAN BE ACCESSED THROUGH THE WEB SITE. THE MI DATA WAREHOUSE IS A PASSWORD PROTECTED (APPLY FOR PASSWORD THROUGH THE WEB SITE) SEARCHABLE DATA BASE THAT CONTAINS THE RESULTS OF PAST MIS. DATA BASE SEARCHES CAN BE TAILORED IN A VARIETY OF WAYS TO SUIT YOUR DATA REQUIREMENTS.
- D. PAST INSURV SUBMARINE MI ISSUES MESSAGES ARE AVAILABLE.//